# **Awareness Training**

## On

# Marijuana



## **April 2004**

Navy Personnel Command
Navy Alcohol and Drug Abuse Prevention Branch (Pers-671)
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#### TAKE TIME TO PREPARE!

# One of the best ways to combat illicit drug abuse by Sailors is to stay informed and keep them informed.

Goal: From the information presented, participants will become aware of what Marijuana is, who is using Marijuana, the symptoms of marijuana use and the health consequences associated with marijuana use.

#### Training Objectives:

Participants will be able to

- ♦ explain what marijuana is, how marijuana is used and who is using it;
- ♦ identify the behavioral and physical symptoms of Marijuana use;
- ◆ Cite the long and short-term health effects of Marijuana use;
- ♦ Identify the most commonly used street terms associated with marijuana use.

#### Information:

- ♦ This awareness training has been developed so the information can be delivered, in whole as part of command GMT or in part via Plan-of-the-Day notes, memos, Division/Workcenter notices, flyers, posters, etc.
- ◆ Before conducting training, trainer may wish to get further information from:

National Institute on Drug Abuse (NIDA) by logging on the NIDA website: www.drugabuse.gov or call toll free 1-888-644-6432.

National Clearinghouse for Alcohol & Drug Information (NCADI) Website: www.health.org or call toll free 1-800-729-6686.

Navy Drug Detection and Deterrence Branch (Pers-671) Commercial: (901) 874-4240/4626; DSN 882-4240/4626; E-mail

## Marijuana Awareness Training

#### INTRODUCTION

Marijuana is the most widely abused illegal substance in the United States today. Most of the Marijuana used in the United States comes from Mexico, Canada, or is grown domestically.

Marijuana today is more potent and its effects can be more intense. The concentration of THC, the main psychoactive ingredient in marijuana, can vary from 3 to 25 percent - THC content has been higher than 35 percent on rare occasions. The form of marijuana known as sensemilla (Spanish, sensemilla: without seed), higher quality marijuana usually grown domestically, is preferred for its high THC content.

Marijuana comes from the hemp plant Cannabis Sativa L. The plant grows wild throughout most of the tropic and temperate regions of the world. The hemp plant contains tough fibers in its stem. These fibers are used in the production of a variety of products ranging from rope to hair care products. In the United States, cannabis is legally grown for scientific research.

Three forms of cannabis - marijuana, hashish, and hashish oil- are distributed illegally in the United States. Having no currently accepted medical use in treatment in the United States, they remain under Schedule I of the Controlled Substance Act. Today, cannibis is illegally cultivated, both indoors and out, to maximize its THC content, thereby producing the greatest possible psychoactive effect.

## WHAT IS MARIJUANA

Marijuana, the most commonly abused drug in the United States, was once thought relatively harmless but is now recognized as a dangerous "gateway drug" that opens the door to use of other mood-altering chemicals. A shredded green/brown mixture of flowers, stems, seeds, and leaves of the hemp plant Cannabis Sativa; is usually is smoked as a cigarette (joint, nail), or in a pipe (bong). It also is smoked in blunts, which are cigars that have been emptied of tobacco and

refilled with marijuana, often in combinations with another drug. Use also might include mixing marijuana into foods or brewing it as tea. A marijuana joint can contain PCP, LSD, Embalming Fluid, Pesticide, or Cocaine. A more concentrated, resinous form of marijuana is called hashish and a sticky black liquid form is called hash oil. Marijuana smoke has a strong, distinctive usually "sweet-and-sour" odor. There are over 200 slang terms for marijuana including "pot," "herb," "weed," "grass," "boom," "Mary Jane," "gangster," "ganja" "widow" and "chronic." In recent years, it has appeared in blunts. These are cigars that have been emptied of tobacco and re-filled with marijuana, often in combination with another drug, such as crack. Sinsemilla, Spanish for "without seed" is a more potent form of marijuana.

The main active ingredient in marijuana is THC (delta-9-tetrahydocannabinol). In 1988, it was discovered that the membrane of certain nerve cells in the body contained protein receptors that bind THC. Once securely in place, THC kicks off a series of cellular reactions hat ultimately lead to the high that users experience when they smoke marijuana.



Live marijuana plants: Cannabis sativa



Dried marijuana buds



Blunts are hollowed out cigars filled with marijuana

#### SOCIAL HISTORY OF MARIJUANA

Marijuana cultivation began in the United States around 1600 with the Jamestown settlers, who began growing the cannabis sativa or hemp plant for its unusually strong fiber that was used to make rope, sails, and clothing. Until after the Civil War, marijuana was a source of major revenue for the United States. During the 19th century marijuana plantations flourished in Mississippi, Georgia, California, South Carolina, Nebraska, New York, and Kentucky. Also during this period, smoking hashish, a stronger preparation of marijuana derived from the dried resin of the plant, was popular throughout France and to a lesser degree in the United States.

Between 1850 and 1937, marijuana was widely used throughout United States as a medicinal drug and could easily be purchased in pharmacies and general stores. Recreational use was limited in the United States until after the Mexican Revolution of 1910, when an influx of Mexican immigrants introduced the habit.

The Volstead Act of 1920, which raised the price of alcohol in the United States, positioned marijuana as an attractive alternative and led to an increase in the use of the drug. "Tea pads," where a person could purchase marijuana for 25 cents or less, began appearing in cities across the United States.

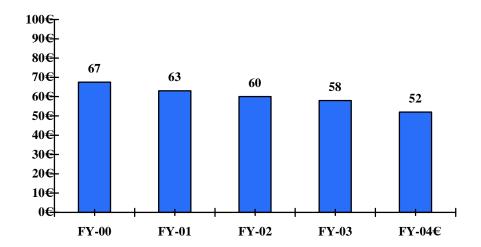
By 1930 it was reported that there were at least 500 of these "tea pads" in New York City alone. During the Great Depression as unemployment increased, resentment and fear of the Mexican immigrants became connected to marijuana use. Numerous research studies linked marijuana use by lower class communities with crime and violence. In 1937, Congress passed the Marijuana Tax Act, which criminalized the drug. From 1951 to 1956 stricter sentencing laws set mandatory minimum sentences for drug-related offenses.

#### THE SCOPE OF MARIJUANA USE

The Department of Defense conducted a Worldwide Survey of military personnel in 1980. The survey responses revealed that 46% of Navy and Marine Corps junior enlisted used marijuana during the previous 30 days and that 26% of these reported being under the influence of

drugs while at work. One of a series of events which highlighted the seriousness of the drug abuse problem was the crash of an EA-6B Prowler on the deck of the USS Nimitz in 1981. The post accident investigation revealed that six of the fourteen dead aircrew and sailors had traces of THC in their blood, evidence of marijuana use.

Marijuana continues to be the most commonly used illicit drug in the Navy today. Between FY-00 and FY-04, 52-67 percent of all positive urinalysis results were positive for marijuana. The graph below illustrates the percentages of marijuana positives from FY-00 to FY-04:



Source: ADMITS

More than 83 million Americans (37 percent) age 12 and older have tried marijuana at least once, according to the 2001 National Household Survey on Drug Abuse (NHSDA).

Marijuana use is widespread among adolescents and young adults. The percentage of middle-school students who reported using marijuana increased throughout the early 1990s. The 2002 Monitoring the Future Survey, which annually surveys teens, college students, and 19-40 year old adults for recent drug use, reports 6.0% of twelfth graders, 16.3% of the 19-28 year old respondents and 2.3% of 29-30 year old respondents smoke marijuana on a daily basis. Noteworthy, the survey reveals that 3.0% of 35-40 year old respondents still currently smoke

marijuana on a daily basis. That amounts to 1 in every 33 adults. The 2002 survey also reported that marijuana use increased by 1.0% among 19 and 28 year old respondents from 2001.

The Drug Abuse Warning Network (DAWN), a system for monitoring the health impact of drugs, estimated that, in 2001, marijuana was a contributing factor in more than 110,000 emergency department (ED) visits in the United States, with about 15 percent of the patients between the ages of 12 and 17, and almost two-thirds male.

In 1999, the National Institute of Justice's Arrestee Drug Abuse Monitoring Program (ADAM) found that on average, 39 percent of adult male arrestees and 26 percent of adult female arrestees tested positive for marijuana. ADAM collected data on juvenile arrestees in nine states and found that marijuana was the most commonly used drug among these youths. On average, data indicated 53 percent of juvenile male and 38 percent of juvenile female arrestees tested positive for marijuana.

Marijuana is frequently combined with other drugs, such as crack cocaine, PCP, formaldehyde, and codeine cough syrup, sometimes without the user being aware of it. Thus, the risks associated with marijuana use may be compounded by the risks of added drugs, as well.

#### EFFECTS AND SIGNS OF MARIJUANA USE

Marijuana is usually smoked. Its effects are felt within minutes, peaks in 10 to 30 minutes, and may linger for two or three hours. A person who smokes marijuana on a regular basis builds up a tolerance to the drug, and will need to smoke larger amounts of marijuana in order to achieve a "high." The intensity of the effects one experiences may vary between individual users.

The most common signs associated with marijuana use are:

- Rapid, loud talking and bursts of laughter
- Sleepy or sluggish appearance
- Lack of concentration and coordination.
- Forgetfulness
- Swelling and redness in whites of eyes.

- "Burnt Rope" odor on clothing or breath.
- Feeling that time passes slowly.
- Craving for sweets.
- Increased appetite.
- Use or possession of marijuana smoking objects including roach clip, packs of rolling papers, pipes or bongs.

#### Common marijuana smoking objects



#### HEALTH EFFECTS OF MARIJUANA USE

Marijuana contains more than 400 known toxins and cancer-causing chemicals, which are stored in fat cells for as long as several months. Smoking one marijuana cigarette deposits four times more tar in the lungs than one filtered cigarette. Marijuana users experience the same health problems as tobacco smokers, such as bronchitis, emphysema and bronchial asthma. Extended use increases risk of lung diseases and reproductive system abnormalities. Marijuana also affects the body's ability to combat illness.

Effects of Marijuana on the Brain

THC affects the part of the brain that controls learning, memory, emotions and motivation. Marijuana destroys the nerve cells control these functions. As a result, the marijuana user will experience memory loss and learning difficulties.

Recent research findings also indicate that long-term use of marijuana produces the damage in the brain similar to those seen after long-term use of other major drugs of abuse.

#### Effects on the Lungs

Someone who smokes marijuana regularly may have many of the same respiratory problems that tobacco smokers have. These individuals may have daily cough and phlegm, symptoms of chronic bronchitis, and more frequent chest colds. Continuing to smoke marijuana can lead to injured or destroyed lung tissue.

#### Myth: Marijuana is safer to smoke than cigarettes.

Fact: Cancer of the respiratory tract and lungs may also be promoted by marijuana smoke. A study comparing 173 cancer patients and 176 healthy individuals produced strong evidence that smoking marijuana increases the likelihood of developing cancer of the head or neck, and the more marijuana smoked the greater the increase. Marijuana smoking doubled or tripled the risk of these cancers!

Marijuana use may cause cancer of the lungs and other parts of the respiratory tract because it contains irritants and cancer causing agents. In fact, marijuana smoke contains <u>four times</u> as many cancercausing agents than cigarettes. THC also contains high levels of a chemical that increases the risk of cancer. Marijuana users usually inhale more deeply and hold their breath longer than tobacco smokers do, which increases the lungs' exposure to the cancer causing agents. Puff for puff, marijuana smoke is more hazardous to your health than cigarette smoke.

Marijuana use has been shown to increase users' difficulty in trying to quit smoking tobacco. This was recently reported in a study comparing smoking cessation in adults who smoked both marijuana and tobacco with those who smoked only tobacco.

The relationship between marijuana use and continued smoking was particularly strong in those who smoked marijuana daily at the time of the initial interview and 13 years prior to the follow-up interview.

A study of 450 individuals found that people who smoke marijuana frequently but do not smoke tobacco have more health problems and miss more days of work than nonsmokers do. Many of the extra sick days used by the marijuana smokers in the study were due to respiratory illnesses.

#### Effects on Heart Rate and Blood Pressure

A person's risk of heart attack during the first hour after smoking marijuana is four times his or her usual risk. Marijuana raises blood pressure and the heart rate. This reduces the ability of the blood to carry oxygen through the body.

Recent studies have shown that smoking marijuana while using cocaine causes an increase in the heart rate by nearly 49 beats a minute. In such an instance, physical exertion can increase the heart rate even more, causing a heart attack.

#### Effects of Heavy Marijuana Use on Learning and Social Behavior

A study of college students has shown that attention, memory and learning were impaired after discontinuing the use of marijuana for 24 hours.

These studies have shown that marijuana users below the college age achieve low grades in school, are more prone to get in trouble with the law, have poor relationships with their parents and associate mostly with other friends who use drugs.

Research also shows that toddlers whose parents use marijuana are more prone to suck their thumbs and have temper tantrums than other toddlers of non-smoking parents.

#### Effects on Pregnancy

Any drug of abuse can affect a mother's health during pregnancy, and this is a time when she should take special care of herself. Drugs of abuse may interfere with proper eating habits and rest, which can affect her body's ability to combat disease.

Some studies have found that babies born to mothers who used marijuana during pregnancy were smaller than those born to mothers who did not use the drug. In general, smaller babies are more likely to develop health problems.

A nursing mother who uses marijuana passes some of the THC to the

baby in her breast milk. Research indicates that the use of marijuana by a mother during the first month of breast-feeding can impair the infant's ability to control their muscles.

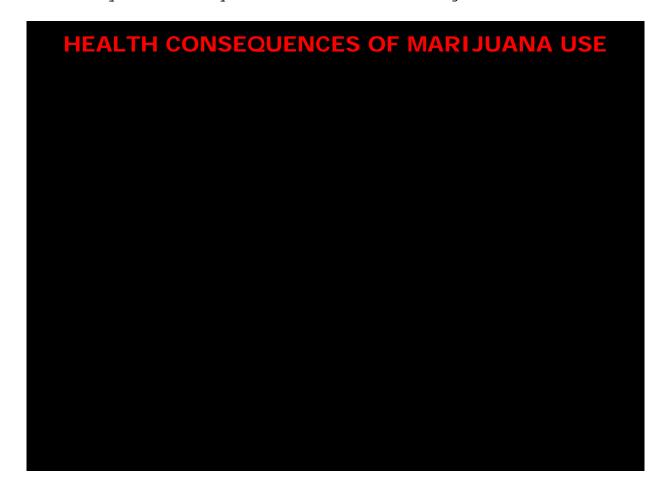
#### Addictive Potential

#### Myth: Marijuana is not addicting.

Fact: Long-term marijuana use can lead to addiction. In 1999, more than 220,000 people entering drug abuse treatment programs reported that marijuana was their primary drug of abuse.

Along with craving, withdrawal symptoms can make it hard for long-term marijuana smokers to stop using the drug. People trying to quit report they experience irritability, difficulty sleeping, and anxiety. They also appear to have increased aggression.

Here's a quick summary of the effects of marijuana use:



#### MARIJUANA SLANG TERMS

Acapulco Gold - a strain of marijuana with gold or yellow highlights.

Bag - A plastic bag containing marijuana.

Blow a Number - use cannabis.

Blunt- A hollowed out cigar filled with marijuana.

Bong - a cylindrical water pipe used to smoke marijuana.

Bud - a tight cluster of marijuana leaves, stems, and seeds.

Bullet/Bullies - cannabis in tin foil.

**Burnout** - a slang term for a state of apathy and deadened perceptions which can result from habitual use of marijuana.

Buzz - slang term for a high or a drug-induced euphoria.

Cabbage - least potent part of cannabis plant, i.e. the leaves.

Columbian - a strain of marijuana.

Chronic - High potency marijuana such as sinsemilla or Thai-stick.

Deal/Deal Bag - cannabis in plastic bag.

Dope - slang term for marijuana and other drugs.

Grass - slang term for marijuana.

Green - cannabis.

**Hashish** - a form of cannabis made of either from the cannabis sativa plant or its resin.

**Head** - primo or solid. Most potent part of cannabis plant, the flowering part of the female plant.

High - a widely used slang term for euphoria and intoxication.

Hit - a single drag or inhalation of marijuana smoke.

**Joint** - a hand-rolled marijuana cigarette.

Killer - High potency marijuana such as sinsemilla or Thai-stick.

Loaded - slang term for state of being high or intoxicated.

Oil/Hash Oil - a form of cannabis which is extracted or distilled from cannabis sativa.

Ounce - a standard unit of measurement for marijuana.

Pipe - used to smoke cannabis.

Pot - a slang term for marijuana.

Reefer - slang term for marijuana.

Roach - the small end of a marijuana joint which remains after most of the cigarette is smoked. Can be sniffed or eaten.

**Roach Clip** - a device used to hold the roach or the tail end of a marijuana joint.

Rolling Papers - cigarette papers used to make a marijuana joint. Scale - paraphernalia used to weigh drug quantities for selling purposes.

**Sensemilla** - A highly potent form of marijuana that has high amounts of THC than regular marijuana.

Sherm - marijuana dipped in formaldehyde.

**Shotgun** - Method of using cannabis.

**Smoking Stones** - paraphernalia used to hold marijuana joints while smoking.

**Spaced Out** - slang term for a drug-induced state of being lost or out of touch with surroundings.

Spotting - using cannabis oil by burning on tin foil.

**Stash** - any container or place used to store marijuana or other drugs.

Stoned - slang term for being high or intoxicated on marijuana.

Toke - slang term for art inhalation of marijuana or hashish smoke.

Take a Toke - use cannabis.

Water Pipe - paraphernalia used to smoke marijuana or hashish which filters the smoke through water.

Weed - slang term for marijuana.

#### POD NOTES

If you think smoking pot won't affect your driving, you may be in for a rude awakening. The likelihood of a car crash is increased by some of the immediate effects of smoking pot--longer reaction time, poor physical coordination, and impaired concentration.

Marijuana contains the same cancer-causing chemicals as tobacco. Smoking five joints a week is the equivalent of smoking an entire pack of cigarettes every day. In the short term, this leads to lung and respiratory problems, wheezing, and frequent chest colds. Longterm use increases the chances of tissue damage and lung cancer, and also causes changes in the brain similar to those caused by long-term use of cocaine and heroin.

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Marijuana accounts for approximately 70 percent of all positive

drug tests in the Navy.

Substance abuse is the leading cause of incarceration in the United States. 70-80 percent of people in jail are there due to drug offenses or crimes committed while under the influence.

Navy Drug Screening Laboratories (NDSL) tests each and every sample for the presence of illegal drugs. Some Sailors actually believe the rumor that labs only test for 20 percent of samples submitted.

#### FOR MORE INFORMATION ON MARIJUANA USE

More information can be obtained from:

National Institute on Drug Abuse (NIDA) by logging on the NIDA website: http://www.drugabuse.gov/or call toll free 1-888-644-6432.

National Clearinghouse for Alcohol & Drug Information (NCADI) Website: <a href="https://www.health.org">www.health.org</a> or call toll free 1-800-729-6686.

Other resources used in this training:

U.S. Department of Justice (Department of Drug Enforcement) http://www.usdoj.gov/dea

Navy Drug Detection and Deterrence Branch (PERS 671)
DSN 882-4240, 4626 commercial (901) 874-4240, 4626. E-mail